Instruction Sheet for the PASCO Model OS-8475

DIODE LASER FOR PASCO® OPTICS SYSTEMS

Introduction

The OS-8475 Diode Laser for PASCO Optics Systems is designed specifically as an integrated alternate light source for the PASCO OS-8500 Introductory Optics System. This accessory can also be used as an inexpensive light source option for PASCO OS-9250 (advanced) or OS-9251 (intermediate) Optics Systems.

The magnetic steel base of the Diode Laser incorporates an "alignment edge" that, when placed against the alignment rail of your PASCO Optics System, aligns the laser beam to the optical path of your existing system's components. The laser diode assembly can also be rotated 360° adding flexibility to experiment set up. See Figure 1.

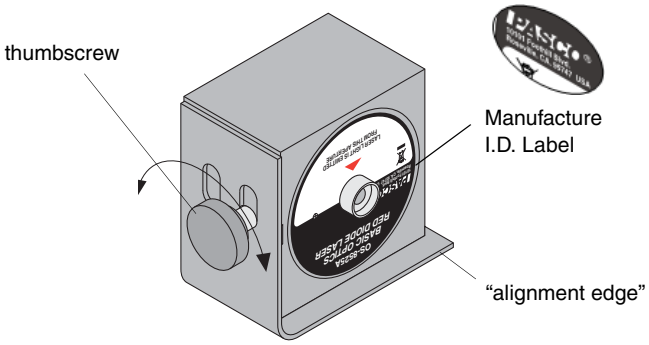
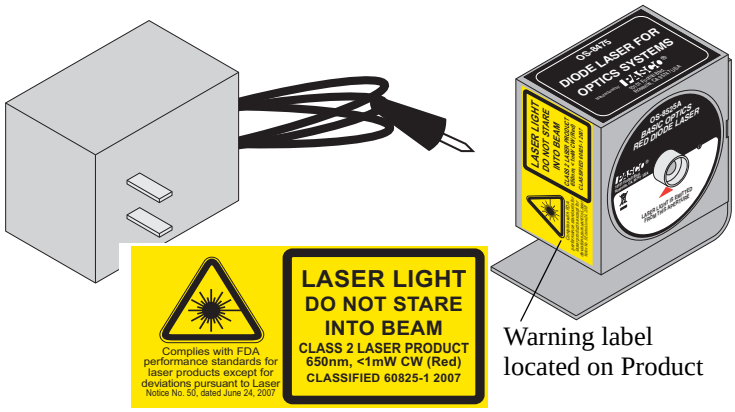


Figure 1: OS-8475 Diode Laser Features

Equipment

– Diode Laser for PASCO Optics Systems.

– 9VDC adapter


LASER LIGHT
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT
650nm, <1mW CW (Red)
CLASSIFIED 60825-1 2007
Complies with FDA performance standards for laser products except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007
Warning label located on Product

Additional equipment recommended:

– PASCO OS-8500 Introductory Optics System

– PASCO OS-9250 Advanced Optics System (without laser)

– PASCO OS-9251 Intermediate Optics System (without laser)

Replacement parts:

Description	PASCO part no.
thumbscrew assembly	617-008
Optics System mount	648-06146

♦**CAUTION -** use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

LASER LIGHT - DO NOT STARE INTO BEAM.

CLASS 2 LASER PRODUCT

This Laser Product is designated as Class 2 during all procedures of operation.

Do not point the laser or allow the laser to be directed or reflected toward people or animals.

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Specifications

Classification	Class II Laser
Wavelength	532 nm (green) 650 nm (red)
Maximum Output	<1 mW
Divergence	<2 mrd
Beam Diameter at aparture	3 mm

Assembly

1. Determine the configuration of your experiment and the location in which the Diode Laser will be set up and adjust the orientation of the Diode Laser accordingly. Make sure the face of the laser diode assembly is relatively perpendicular to the surface of your optics bench. This will minimize the amount of fine adjustment you may need to perform in step 4. Tighten the thumbscrew to secure the laser diode module.
2. Place the “alignment edge” of the Diode Laser against the alignment rail of your PASCO optics bench. See Figures 2 and 3.
3. Plug the 9VDC adapter phone plug into the back of the laser and turn on the laser.
4. If necessary, use the adjustment screws to align the laser beam from left-to-right and up-and down. See Figure 4.
5. When using with the Laser Slits, OS-8529, slide the Laser Diode to the top of the slots on the mount

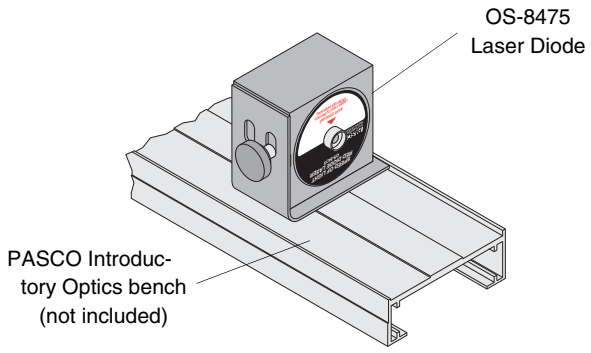

Figure 2: Laser Diode Setup foPASCO Introductory Optics bench

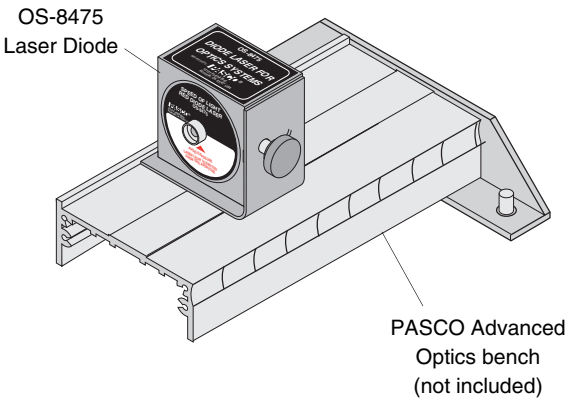

Figure 3: Laser Diode Setup for PASCO Advanced Optics bench

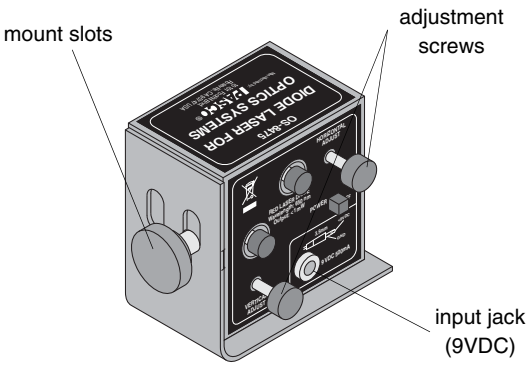

Figure 4: Laser Beam Fine Adjustment

Technical Support

For assistance with any PASCO product, contact PASCO at:

Address: PASCO scientific
10101 Foothills Blvd.
Roseville, CA 95747-7100

Phone: 916-786-3800 (worldwide)
800-772-8700 (U.S.)

Fax: (916) 786-7565

Web: www.pasco.com

Email: support@pasco.com

Limited Warranty

For a description of the product warranty, see the PASCO catalog.

NOTE: NO service or maintenance is allowed, on this product, by the customer. Return unit to the factory for service or repair. Unit is NOT to be opened or modified by the Customer.

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